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1894/95

1894-95.

School of Pharmacy,

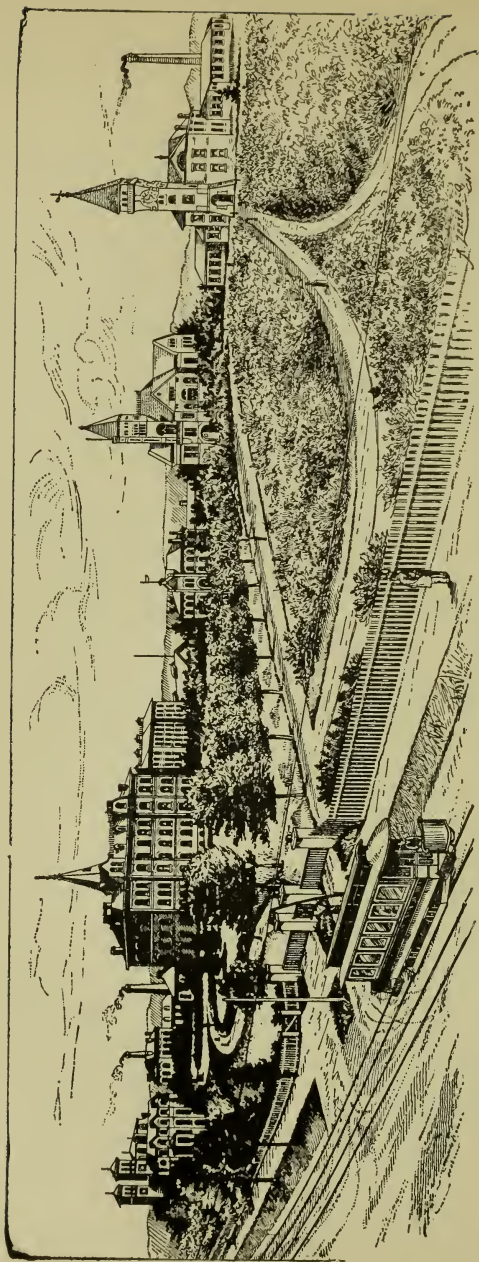
Purdue University,

ELEVENTH ANNUAL REGISTER,

Lafayette, Indiana.



1894-5



PURDUE UNIVERSITY CAMPUS.

1. Art Hall.
2. Pharmacy Building.
3. Engine House.
4. University Hall.
5. Men's Dormitory.
6. Armory.
7. Science Hall.
8. Electrical Building.
9. Engineering Building.

PURDUE UNIVERSITY.

ELEVENTH ANNUAL CATALOGUE

OF THE

SCHOOL OF PHARMACY.

1894-95.

INDIANAPOLIS:

W. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.

1894

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CHARLES B. STUART, SYLVESTER JOHNSON.

CALENDAR 1894-95.

September 25, 1894. Entrance Examination.
September 26, 1894. Lectures begin in School of Pharmacy.
December 19, 1894, to January 2, 1895. Christmas Holidays.
April 18, 1895. State Examination.
April 23, 1895. Close of session in School of Pharmacy.

FACULTY.

JAMES H. SMART, A. M., LL.D.,

President of the University.

ARTHUR L. GREEN, A. M., PH. C.,

Dean and Professor of Chemistry.

STANLEY COULTER, PH. D.,

Professor of Botany.

JULIUS W. STURMER, PH. G.,

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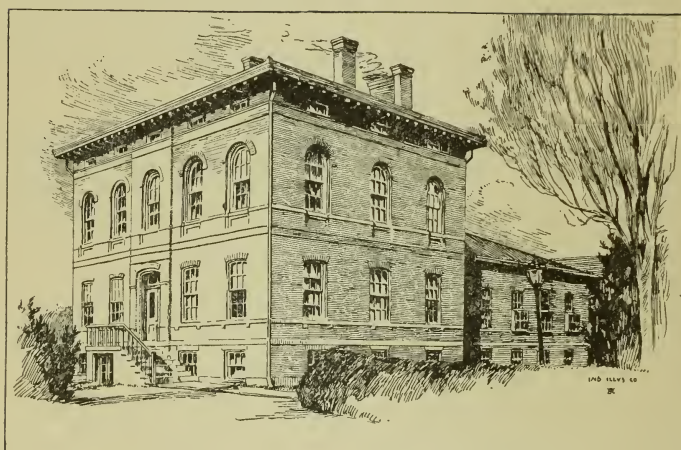
Assistant in Chemistry.

STATE EXAMINERS.

OTTO W. GROSS, FORT WAYNE.

T. J. MOFFITT, EDINBURG.

DAVID HILT, LAFAYETTE.



PHARMACEUTICAL LABORATORY.

GENERAL STATEMENT.

PURDUE UNIVERSITY is the State Institution of Technology. It is supported by legislative appropriations and by the proceeds of an endowment fund granted by the General Government. It derives its name through legislative enactment from John Purdue, who gave to the State for the use of the Institution one hundred and fifty thousand dollars. It has a permanent endowment fund to the amount of three hundred and forty thousand dollars, and other non-productive property in buildings, lands and equipment to the value of four hundred and forty thousand dollars, and an annual income from State appropriations and U. S. Government appropriations.

It has one hundred and eighty acres of land in its campus and farm, fifteen buildings, well-equipped laboratories, shops, museums, library and reading rooms.

The Institution embraces six special schools, including one which affords a thorough and practical training in pharmacy. This School of Pharmacy also offers excellent training for those who expect to engage in chemical pursuits, or to enter the laboratory of a manufacturing pharmacist or chemist. The instruction also constitutes a good preparatory course for those who anticipate attending a school of medicine.

The student is engaged at the University from 8:15 A. M. to 12:30, and from 1:30 to 4:30 P. M., for five days each week. About two-thirds of this time is devoted to laboratory work, and one-third to lectures and recitations. There are neither lectures, recitations nor quizzes in the evening; that time being allotted to

home-study and preparation for the ensuing day's work. The student has, therefore, no time for clerking in a drug store, and must devote his undivided time and energy to his school work.

The instruction covers two school years of twenty-eight weeks each. Special attention is called to the large amount of required laboratory work, and comparison solicited with other schools of pharmacy on this point.

OUTLINE OF REQUIRED WORK.

COURSE.	SUBJECTS.	No. of Hours in Lecture Room.	No. of Hours in Laboratory.
FIRST YEAR.	1. Pharmacy	92	180
	2. Inorganic Chemistry	90	100
	3. Qualitative Analytical Chemistry (Inorganic).	50	300
	4. Pharmacognosy	20	28
	5. Physiology.	36	...
	6. Therapeutics and Doses.	36	...
	Total hours for the year	288	608
	Average per week	32	
SECOND YEAR.	7. Organic Chemistry	70	165
	8. Inorganic Chemistry	56	...
	9. Pharmacy	60	...
	10. Prescription Work	28	116
	11. Botany.	12	40
	12. Materia Medica.	56	...
	13. Qualitative Analytical Chemistry (Organic).	8	75
	14. Quantitative Analytical Chemistry (Inorganic)	12	105
	15. Pharmaceutical Assaying	8	75
	16. Analysis of Urine.	10	42
	17. Identification of Medicines	...	28
	Total hours for the year.	320	646
	Average per week.	34½	

FIRST-YEAR COURSE.

PHARMACY.

Class Work—92 Hours.

(a.) Lectures and recitations on systems of weight and measure, specific gravity and its practical utility; on heat, its generation, its measurement and its use in pharmacy. A practical course in *pharmaceutical problems* will be given in connection with these subjects.

There will also be lectures and recitations on the various processes and manipulations which find application in pharmaceutical practice; as, comminution, solution, filtration, evaporation, precipitation, crystallization, percolation, etc., etc. The working-formulas for the manufacture of pharmaceutical preparations will be given; the various methods will be criticised and the merits and demerits of each pointed out to the student.

(b.) The official, and the important unofficial, galenical preparations will be subjected to systematic study. The student will study, in particular, the percentage composition and the methods of preparation.

Laboratory Work—180 Hours.

In the laboratory each student will make, independently, though under the personal supervision of the instructor, the following preparations:

Three medicated waters.
Five solutions.
Five syrups.
Two elixirs.
One infusion.
One decoction.

Four extracts.
Two masses.
Two glycerites.
One confection.
One honey.
Two powders.

One vinegar.
 Five tinctures.
 Five fluid extracts.
 One soluble extract.
 Three spirits.
 Two mucilages.
 Two mixtures.
 Three liniments.

One oleate.
 Five ointments.
 One cerate.
 Three plasters.
 Ten samples of pills.
 Four samples of troches.
 Five samples of suppositories.
 Six emulsions.

This, like all the laboratory work in the course, is obligatory; but students who have had much experience and acquired special skill in manufacturing will be excused from part or all of the above and provided with advanced work.

INORGANIC CHEMISTRY.

Class Work—90 Hours.

Lectures and recitations on inorganic chemicals, including source, manufacture, chemical reaction, use and general practical application. Attention is also given to impurities, pharmacopœial standards and tests.

Direction is given for laboratory work

Laboratory Work—100 Hours.

In the laboratory each student, independently, prepares the following chemical compounds:

Chromic Anhydride,
 Ferric Oxide,
 Zinc Oxide,
 Mercuric Oxide,
 Lead Oxide,
 Ammonium Hydrate,
 Ferric Hydrate,
 Aluminic Hydrate,
 Zinc Chloride,
 Ammonium Chloride,
 Mercurous Chloride,
 Calcium Chloride,
 Ferric Chloride,
 Zinc Bromide,
 Ammonium Bromide,
 Calcium Bromide,
 Lead Iodide,

Bismuth Subnitrate,
 Silver Nitrate,
 Lead Nitrate,
 Ferrous Sulphate,
 Ferric Sulphate,
 Ammonium Sulphate,
 Zinc Sulphate,
 Copper Sulphate,
 Aluminic Sulphate,
 Sodium Sulphate,
 Sodium Pyrophosphate,
 Potassium Chlorate,
 Calcium Hypophosphite,
 Magnesium Carbonate,
 Precipitated Sulphur,
 Boric Acid,
 Hydrochloric Acid.

QUALITATIVE ANALYTICAL CHEMISTRY (Inorganic).*Class Work—50 Hours.*

Students learn thoroughly the scientific names and chemical formulæ of the various inorganic compounds—hydrates, oxides, acids and salts. Rules are committed on precipitation and on solubility. These rules are of great value, not merely in analytical work, but also in prescription work, where they aid the student in the study of the incompatibilities of inorganic substances. The general process for the detection of acids and bases is committed by the student. He is also taught to write the equations for each chemical reaction.

Laboratory Work—300 Hours.

In the laboratory he verifies the rules on precipitation and solubility; he becomes thoroughly familiar with the chemical behavior of the various acids and bases; he repeatedly works through a scheme of separation and identification of the acids and bases; he then subjects forty individual unknowns (mixtures of inorganic compounds) to a qualitative examination, and reports his results to the instructor.

PHARMACOGNOSY.*Laboratory Work—28 Hours.*

The student will be taught to identify crude vegetable and animal drugs by physical characteristics—appearance, taste and odor. He will also receive a thorough drill on their Latin and English names, with spelling and pronunciation. History and habitat will be given whenever of practical importance.

These studies will be pursued by the class in sections, so that each student can receive the benefit of individual instruction.

PHYSIOLOGY.

Class Work—20 Hours.

The instruction in this subject comprises a description of the organs of the body, with a brief discussion of their functions, and the influences exerted on the same by external conditions. The principal object is to prepare the student for the study of therapeutics.

THERAPEUTICS.

Class Work—36 Hours.

(a.) Medicines are classified according to their therapeutical uses. The different classes are defined and arranged in a manner which will facilitate their study.

(b.) In connection with learning the therapeutical uses of medicines, the student will learn the quantities in which these medicines are administered. A carefully prepared *dose-table* is given. In this table medicines are grouped in a manner which will enable the student to memorize them with comparative facility.

SECOND-YEAR COURSE.

ORGANIC CHEMISTRY.

Class Work—70 Hours.

Lectures and recitations on hydrocarbons, alcohols, ethers, ethereal salts, organic acids, carbohydrates, and other classes of organic compounds; on fermentation products, petroleum products, natural and artificial gas, aniline dyes, synthetically prepared new remedies, and other compounds that are of interest to the pharmacist. The student will study the molecular structure of organic compounds, and will learn to write their structural formulæ. He will also study their manufacture, their impurities, and their uses. In conclusion, he will receive direction for laboratory work.

Laboratory Work—165 Hours.

In the laboratory each student will make the following organic compounds:

Alcohol,	Nitrobenzene,	
Ether,	Aniline,	
Ethyl iodide,	Acetanilid,	
Ethyl nitrite (and spirit of nitrous ether),	Potassium benzene-sulphonate,	
Amyl acetate,	Phenol,	
Chloroform,	Benzoic acid (natural),	
Iodoform,	Benzoic acid (artificial),	
Acetone,	Oil of wintergreen (artificial),	
Acetaldehyde,	Scale Salts {	Citrate of iron,
Oxalic acid,		Tartrate of iron and potas-
Acetamid,		sium,
Glycerine,		Phosphate of iron,
		Citrate of iron and quinine.

INORGANIC CHEMISTRY.

Class Work—56 Hours.

Continuation of first-year work.

PHARMACY.*Class Work—60 Hours.*

(a.) Lectures and recitations on plant-constituents, viz.: starches, sugars, gums, resins, fixed oils, volatile oils, oleo-resins, gum resins, balsams, organic acids, glucosides, alkaloids, etc.; their source, chemical composition, solubility and use. The artificially prepared organic compounds, which find application in medicine or in pharmacy, will be similarly treated.

(b.) Lectures and recitations on the galenical and extemporaneous preparations of the U. S. Pharmacopœia. The official processes will be commented on. The reason for their various steps, as well as certain deviations from common methods, will be made the subject of class-discussions.

PRESCRIPTION WORK.*Class Work—28 Hours.*

Lectures and recitations on the prescription, and on incompatibilities. Also a drill in Latin, with reading interpreting and correcting of Latin prescriptions.

Special attention is paid throughout the year to doses, solubility of chemicals, and to the composition of pharmaceutical preparations.

Laboratory Work—116 Hours.

In the dispensing laboratory students experiment with incompatible mixtures, thereby becoming familiar with the difficulties commonly met with at the prescription counter, and learning how best to overcome them. They fill numerous prescriptions taken from the files of drug stores, besides many typical ones furnished by the instructor.

The acquisition of manipulative skill—skill in measuring, weighing, powder folding, pill rolling, capsule

filling, etc.—constitutes a prominent feature of this work.

Before entering upon prescription work, students are required to pass a review examination on doses of drugs and the percentage composition of their preparations.

This examination will be held at the beginning of the second year.

BOTANY.

Class Work—12 Hours.

(a.) General Lectures. Treating of the embryo, germination, with its conditions and phenomena, structure and functions of the parts of the plant body, assimilation, respiration, growth, irritability, movements and fertilization.

(b.) Special Lectures—Ordinary adulterants of drugs, with microscopical methods for detection of adulterations.

Laboratory Work—40 Hours.

(a.) A careful study of the compound microscope and its appliances, together with practice in mounting, sectioning, etc.

(b.) A study of the various tissues and tissue elements, together with practice in the application of the facts thus obtained in the *detection of adulterations in drugs*.

(c.) A study of the gross anatomy of typical plants and their organs.

MATERIA MEDICA.

Class Work—56 Hours.

(a.) The crude organic drugs will be classified according to their principal constituents, and studied in the following order: drugs containing—(1) starches and gums, (2) sugars, (3) fixed oils, (4) volatile oils, (5)

resins, (6) gum-resins, oleo-resins and balsams, (7) organic acids, (8) tannins, (9) glucosides and neutral principles, (10) alkaloids. The student will learn the Latin names, English names and synonyms, the source, the principal structural characteristics, what adulterations may occur, the active constituents, and the uses.

(b.) The more important drugs, like opium, cinchona, belladonna, etc., etc., will be taken up separately and their physiological action and therapeutical use more fully studied.

Lectures will be given on poisons and antidotes.

QUALITATIVE ANALYTICAL CHEMISTRY (Organic).

Class and Laboratory Work—83 Hours.

(a.) The student is taught the separation and identification of the more common organic compounds; as, benzene, alcohol, chloroform, glycerine, glucose, sucrose, chloral hydrate, tannic, gallic, tartaric, benzoic and salicylic acids, quinine, strychnine, morphine, caffeine and many others.

(b.) Laboratory work in the detection of the more common organic and inorganic poisons in presence of other organic material. The student will work on poisoned foods, separating and identifying the poisons.

As Inorganic Qualitative Analytical Chemistry aids the student in the study of the incompatibilities of inorganic substances so Organic Analytical Chemistry aids the student in the study of the incompatibilities of organic substances.

QUANTITATIVE ANALYTICAL CHEMISTRY (Inorganic).

Class and Laboratory Work—117 Hours.

The preparation of standard volumetric solutions, and their use in the estimation of acids, alkalies, iodine, iron, silver, chlorides, etc. Gravimetric determinations are also made of iron, aluminum, calcium, magnesium, sulphuric acid, hydrochloric acid, phosphoric acid, etc.

The pharmacopœial tests are applied to chemicals and the per cent. of impurities ascertained.

To be competent to do analytical work of this character is of great import to the pharmacist of to-day; but this competency is not the only gain derived from this work: the student also acquires that care and precision which is of inestimable value to the prescrip-tionist.

PHARMACEUTICAL ASSAYING.

Class and Laboratory Work—83 Hours.

This consists in the quantitative estimation of the active constituents in crude drugs and pharmacopœial preparations. The student will estimate the active constituents of the following: cinchona, opium, nux vomica, aconite, belladonna, guarana, ipecac, podophyllum, spirit of nitrous ether, three fluid extracts, one pill mass, one scale salt. He will also determine the amount of alcohol and glycerine in galenical preparations. The work, as arranged, familiarizes the student with the various standard methods of assaying.

ANALYSIS OF URINE.

Class Work—10 Hours.

Lectures and recitations on the composition of urine; on abnormal constituents and their pathological indications.

Laboratory Work—42 Hours.

This consists in the chemical and microscopical examination of normal and abnormal urine. The student is furnished with natural (not artificial) samples, obtained through resident physicians.

IDENTIFICATION OF MEDICINES.

Laboratory Work—28 Hours.

Students learn to identify on inspection crude, granulated and powdered organic drugs, inorganic and organic chemicals, and pharmaceutical preparations.

The frequency with which examinations and quizzes are conducted in each subject by the instructor in charge, constitutes a characteristic of the courses; thus rendering special quiz classes superfluous.

During laboratory hours the instructors are in constant attendance, to direct the student in his work whenever necessary.

In the laboratory only one student is assigned to each table.

REQUIREMENTS FOR ADMISSION.

Candidates for admission must have a good knowledge of the common English branches. In arithmetic special familiarity with denominate numbers, fractions, percentage and proportion will be required. Examination for applicants will be held Tuesday, September 25, at 9 A. M.

Those presenting satisfactory certificates of proficiency are exempt from entrance examinations. No experience in a drug store is required for entrance.

Women are admitted on the same conditions as men.

No one will be allowed to enter the School of Pharmacy from the other Schools of Purdue University without special permission.

The object of this school is not to offer a short course to a large number, but to give thorough instruction to small classes. Only a limited number of students will be accepted.

STATE EXAMINATION.

This examination is conducted by the Committee on Education of the Indiana Pharmaceutical Association, and will be held April 18, 1895.

GRADUATION.

The degree of *Graduate in Pharmacy (Ph. G.)* will be conferred upon each student who successfully completes the required course, and passes the State Examination.

The degree of *Pharmaceutical Chemist* (*Ph. C.*) will be conferred upon students under the following conditions.

Resident Students Only—Students must have received the degree of Graduate in Pharmacy from Purdue University or from some other institution whose requirements are equal to those of Purdue University. They must complete, at Purdue University, the graduate course of one year prescribed for this degree and pass an examination thereon.

EXPENSES.

The expenses are far less than in the majority of similar schools, while unusual facilities are afforded for laboratory practice. The year is divided into two terms; the first commences September 26, 1894, and the second January 2, 1895.

The fees, which are payable in advance, are as follows:

FIRST TERM.

Entrance fee	\$5 00
Incidentals.....	5 00
Chemicals.....	14 00

SECOND TERM.

Incidentals.....	\$5 00
Chemicals.....	14 00

No extra fees are required of students who come from other States.

There will also be charges for breakage and for such chemicals as may be required in unusual quantities. To cover such expenses, a laboratory deposit of \$15.00 is required at the time of admission. From \$8.00 to \$10.00 of this deposit is usually returned to the student at the end of the year.

Good board may be had for \$2.75 a week, and by clubbing together students can reduce board to about

\$2.00 or \$2.25. Furnished rooms can be had for about 75 cents per week.

The total expense of board, room rent, fuel, fees, books and washing for twenty-eight weeks need not exceed \$160. Students of the School of Pharmacy must provide their own rooms, as they can not be accommodated in the college dormitory.

A fee of \$5.00 will be required for the diploma, and should be paid before commencement week.

Letters of inquiry may be addressed to

ARTHUR L. GREEN,
Dean of Purdue School of Pharmacy,
 LaFayette, Ind.

TEXT BOOKS.

The latest editions of the following books will be required for use:

First Year—

U. S. Pharmacopœia.

Richter's Inorganic Chemistry.

Prescott's First Book in Qualitative Chemistry.

Second Year—

U. S. Dispensatory.

Attfeld's Chemistry.

Lyon's Pharmaceutical Assaying.

Orndorff's Laboratory Manual.

Cheever's Select Methods in Quantitative Analysis.

Tyson's Analysis of Urine.

Warner's Manual of Materia Medica and Therapeutics.

STUDENTS 1893-94.

SECOND-YEAR STUDENTS.

Christian H. Albersmeyer,	<i>Fort Wayne.</i>
William N. Arnett,	<i>Fortville.</i>
Frank R. Bass,	<i>Moorestville.</i>
Harry T. S. Best,	<i>Brookville.</i>
Dally Bland,	<i>Worthington.</i>
Frank J. Boatman,	<i>Indianapolis.</i>
Harvey A. Burkee,	<i>South Bend.</i>
Alexander M. Carter,	<i>Harriman, Tenn.</i>
George A. Clapesattle,	<i>Fort Wayne.</i>
George C. Cullom,	<i>Frankfort.</i>
Edwin C. Downey,	<i>Rochester.</i>
Oliver E. Dunn,	<i>Milwaukee, Wis.</i>
Frederick H. Flaughner,	<i>New Richmond.</i>
Miss Mabel E. Fleming,	<i>Princeton.</i>
Willis H. Fox,	<i>Three Rivers, Mich.</i>
Otto F. Grahrl,	<i>Fort Wayne.</i>
Norris H. Harding,	<i>Osgood.</i>
Geo. W. C. Haines,	<i>LaFayette.</i>
Leonidas C. Hinchman,	<i>Rushville.</i>
Harry C. James,	<i>LaFayette.</i>
Orley Evert Kennon,	<i>Bartonia.</i>
J. Dillon King,	<i>Blooming Grove.</i>
William F. Kirkhoff,	<i>LaFayette.</i>
John H. Kneal,	<i>Montmorenci.</i>
Charles O. Maple,	<i>Indianapolis.</i>
Amos M. Marsh,	<i>Sackett's Harbor, New York.</i>
Thomas P. Marshall,	<i>Butler, Georgia.</i>
Henry M. Mehlig,	<i>Tipton.</i>
Perry M. Murphy,	<i>Whitcomb.</i>
Gustavus A. Petersdorf,	<i>LaFayette.</i>
Conrad Schroeder, Jr.,	<i>Shelbyville.</i>
Oliver W. Stephenson,	<i>Livonia.</i>
Frederick A. Stokes,	<i>Rockville.</i>
George H. Stotler,	<i>Indianapolis.</i>
William M. Ticen,	<i>Colfax.</i>
Edward C. Tinsley,	<i>Indianapolis.</i>
Alva I. Ulrich,	<i>Three Rivers, Mich.</i>
Total, 37.	

FIRST-YEAR STUDENTS.

Frank W. Arthur,	<i>Indianapolis.</i>
Arny Baldwin,	<i>Westfield.</i>
Henry L. Beerman,	<i>Indianapolis.</i>
Arthur Benke,	<i>Fort Wayne.</i>
Rudolph P. Bischoff,	<i>Fort Wayne.</i>
Vinson D. Bradsher,	<i>Clifton Hill, Mo.</i>
Walter W. Briggs,	<i>Vicksburg, Mich.</i>
James D. Brown,	<i>Burnettsville.</i>
Arthur B. Carr,	<i>Henryville.</i>
Charles Chavis,	<i>Indianapolis.</i>
Frank E. Conkling,	<i>Spring Water, N. Y.</i>
Charles E. Cooper,	<i>Morton.</i>
Joseph K. Cromley,	<i>Gallipolis, O.</i>
Cassius E. Elliott,	<i>Sheridan.</i>
Edward Ferger,	<i>Indianapolis.</i>
Miss Irma Fitch,	<i>Seymour.</i>
Homer W. Foreman,	<i>Terre Haute.</i>
Alonzo L. Gerber,	<i>Topeka.</i>
Miss Helena K. Gray,	<i>Princeton.</i>
Frank P. Hoopengardner,	<i>Ossian.</i>
Edward H. Jackson,	<i>Greenfield.</i>
William C. Jonas,	<i>Glenwood.</i>
Thomas A. Jones,	<i>Corvallis, Oregon.</i>
John H. Kappel,	<i>Fort Wayne.</i>
Martin J. Mauch,	<i>LaFayette.</i>
John L. McClung,	<i>Rochester.</i>
Bert L. McDill,	<i>Greensburg.</i>
Clay F. Meek,	<i>Spencer.</i>
Reader J. Meroney,	<i>Topeka.</i>
Albert D. Monninger,	<i>Indianapolis.</i>
Hubert O. Moore,	<i>Westfield.</i>
Harry C. Newland,	<i>Indianapolis.</i>
Nelson C. Olin,	<i>Indianapolis.</i>
George Orf,	<i>Indianapolis.</i>
Samuel R. Pence,	<i>Frankfort.</i>
Charles W. Rehling,	<i>Fort Wayne.</i>
Charles F. Reno,	<i>Southport.</i>
Ernest A. Richey,	<i>Richmond.</i>
Reason D. Sanders,	<i>Jonesville.</i>
William I. Scott,	<i>Kokomo.</i>
Edward A. Shock,	<i>Huntington.</i>
Ira A. Skinner,	<i>Stockwell.</i>
William J. Snoddy,	<i>West LaFayette.</i>
Benjamin B. Taylor,	<i>Thorntown.</i>

Miss Agnes E. Uhl,	<i>Monticello.</i>
Charles E. Vanderkleed,	<i>La Fayette.</i>
William M. Worsham,	<i>Glenwood.</i>
Total, 47.	

POST-GRADUATE.

Justus C. Houser,	<i>California, Mo.</i>
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SUMMARY.

Second year	37
First year	47
Post-Graduate	1
Total	85

ALUMNI.

WITH THE DEGREE OF DOCTOR OF PHARMACY.

JOHN N. HURTY, M. D., pharmacist and analytical chemist, 102 North Pennsylvania Street, Indianapolis, Ind., Professor of Chemistry and Metallurgy in Indiana Dental College; also Lecturer on Hygiene in Indiana Medical College.

GEORGE W. SLOAN, M. D., pharmacist, 22 West Washington Street, Indianapolis, Ind., President of the American Pharmaceutical Association, 1879-1880. Lecturer on Pharmacy in Indiana Medical College.

JOSEPH R. PERRY, pharmacist, 149 East Washington Street, Indianapolis, Ind. Editor of *Indiana Pharmacist*; also Lecturer on Pharmacy in Eclectic College of Physicians and Surgeons.

WITH THE DEGREE OF GRADUATE IN PHARMACY.

1886.

ERNEST G. EBERHARDT, analytical chemist for Eli Lilly & Co., Indianapolis, Ind.

MANUEL JAY, physician, 757 South Michigan Street, South Bend, Ind.

JOHN KENNEDY, in charge of prescription department of R. G. Moore, Vincennes, Ind.

EDWIN J. MOWRY, pharmacist, Columbia City, Ind.

LOUIS H. SCHULMEYER, chemist for Daniel Stewart, wholesale druggist, Indianapolis. Address, 725 North Tennessee Street.

BERT D. WESTENFELDER, chemist to the American Oak Leather Co.,
Cincinnati, O. Address, 247½ Clinton Street.

EMORY J. YEAGER, pharmacist, in the firm of Wells, Yeager & Best
Co., LaFayette, Ind.

1887.

MILLARD CALDWELL, pharmacist, in the firm of Krauss & Caldwell,
Hartford City, Ind.

WILLIAM H. DICKINSON, pharmacist, No. 626 West Lake Street, Chicago.

CHARLES L. HACKETT, pharmacist, in the firm of John Hackett & Son,
Roanoke, Ind.

WILLIAM M. ROSS, pharmacist, cor. Wabash and Tenth, St. Paul,
Minn.

ALBERT W. SHOUP, physician, LaFayette, Ind.

1888.

PETER H. FETTERS, pharmacist, No. 155 Prospect Street, Indianapolis,
Ind.

SAMUEL KENNEDY, physician, Shelbyville, Ind.

GEORGE C. MORRISON, pharmacist, South East Street, Indianapolis, Ind.

WILLIAM H. VAWTER, pharmacist, in the firm of Warner & Vawter,
corner Main and Sixth Streets, LaFayette, Ind.

1889.

ADEN L. CAVINS, pharmacist, Bloomfield, Ind.

LUTHER J. HORD, prescription clerk at Cross, Oklahoma.

MERIT POST, pharmacist, in the firm of C. P. Post & Son, Lowell, Ind.

CHARLES W. SHAFER, pharmacist, Morocco, Ind.

GEORGE SPITZER, Lecturer on Operative Pharmacy, Purdue University,
LaFayette, Ind.

CORTICE M. WARNER, pharmacist, in the firm of Warner & Vawter,
corner Sixth and Main Streets, LaFayette, Ind.

DON CARLTON WHITEHEAD, pharmacist, Jerry City, Ohio.

1890.

ROBERT W. ALLEN, pharmacist, formerly at Alexandria, Ind.

ELDEN BEASLEY, pharmacist, Union, Ind.

MOSES T. BOGGS, prescription clerk, with Johnson Bros., Logansport,
Ind.

BERT CRITZ, prescription clerk, with S. M. Smith, Osgood, Ind.

JOHN E. DUNLAVY, prescription clerk at Allen's Drug Store, Greencastle,
Ind.

- WILLIAM E. EASTERDAY, prescription clerk at Some's Pharmacy, N. E. corner Sixth and Ohio Streets, Terre Haute, Ind.
- JOSEPH L. FEIBLEMAN, traveling salesman, with Daniel Stewart, Indianapolis. Address, 226 East New York Street.
- HENRY H. HARRIS, prescription clerk, with E. H. Simpkins, Boswell, Ind.
- GEORGE W. LACEY, Chicago, Ill. (?)
- ALVIN H. LEESER, prescription clerk, with Frank Falkenberg, corner West Chicago Avenue and Robey Street, Chicago, Ill.
- HENRY W. MEINZEN, pharmacist, corner Chute and Maumee Avenue, Fort Wayne, Ind.
- FRANK RIGGS, pharmacist, in firm of Riggs & Plogsterth, Marion, Ind.
- FRANK E. SHATTUCK, in charge of laboratory of the Buntin Drug Co., Terre Haute, Ind.
- MARION A. STOUT, prescription clerk, with Charles C. Deam, Bluffton, Ind.
- CHARLES W. WATKINS, prescription clerk, with S. Mühl, corner 13th and Illinois Streets, Indianapolis, Ind.
- JOHN M. WESTFALL, prescription clerk, with C. C. Pierney, corner 6th and Chestnut Streets, St. Louis, Mo.

1891.

- JOSEPH H. ANDERSON, pharmacist, in the firm of Anderson & Werkman, Hull, Iowa.
- JONATHAN M. BAUER, in charge of H. H. Flandermeyer's pharmacy, No. 839 Superior Street, Cleveland, Ohio.
- ISAAC D. BONNETT, pharmacist, in the firm of I. D. Bonnett & Co., Shreve, Ohio.
- PAUL D. BROWN, pharmacist, Rochelle, Ill.
- CHARLES C. CRAMPTON, physician, Delphi, Ind.
- AUGUST DIEHL, pharmacist, Union Street, LaFayette, Ind.
- WILLIAM S. GREEN, prescription clerk, with A. Angell, Denver, Col.
- WILLIAM J. HART, DeForest, Ind.
- ALVIN L. HILLS, Pittsburg, Texas. (?)
- JAMES W. KYLE, pharmacist, Delphi, Ind.
- JOSEPH O. McCARTY, deceased.
- JOHN S. MAX, studying medicine.
- OSCAR A. MEANS, pharmacist, No. 1228 Broadway, Logansport, Ind.
- GEORGE C. METZGER, deceased.
- LOUIS W. PLOGSTERTH, pharmacist, in the firm of Riggs & Plogsterth, Marion, Ind.
- FRED. P. PYKE, prescription clerk, with Thomas Thornburg, No. 190 Fort Wayne Avenue, Indianapolis, Ind.
- WILDEY F. REYNOLDS, prescription clerk, with Charles W. Eichrodt corner of First and West Streets, Indianapolis, Ind.

DAVID L. RIFE, pharmacist, in the firm of Cotton & Rife, Crawfordsville, Ind.

HARRY E. SHARRER, prescription clerk, with M. M. Murphy, Delphi, Ind.

JAMES R. SPIVEY, pharmacist, Oxford, Ohio.

FRANK O. STABLER, Athens, Col.

JULIUS W. STURMER, Professor of Pharmacy, Purdue University, LaFayette, Ind.

1892.

JOSEPH D. BARTLETT, prescription clerk, with David Hill, LaFayette, Ind.

FRANK M. BEST, pharmacist in the firm of Wells, Yeager & Best Co., LaFayette, Ind.

JOHN BRIGHT, prescription clerk, with M. R. Coombs, Terre Haute, Ind.

ALBERT H. CAULKINS, prescription clerk, with Browning & Co., Indianapolis, Ind.

FRANK CAVINS, Bloomfield, Ind.

MISS LOVE E. CRAMPTON, Delphi, Ind.

GEORGE E. CRAVENS, prescription clerk with Aden Cavins, Bloomfield, Ind.

JAMES F. FISKE, prescription clerk, at Stone's Pharmacy, cor. Fifty-first and State Streets, Chicago, Ill.

NATHAN K. GARHART, in the firm of Fox & Garhart, manufacturers of dental specialties, Indianapolis, Ind.

EDWARD L. GREEN, prescription clerk, with C. A. Spencer, No. 1020 Fifteenth Street, Denver, Col.

B. FRANKLIN GRIFFITH, prescription clerk, with Frech & Dumbauld, Huntington, Ind.

MISS NINA B. HART, DeForest, Ind.

BENJAMIN M. HOAK, instructor in Materia Medica, Purdue University, LaFayette, Ind.

EDWARD KADEL, in charge of laboratory of Cook, Bell & Black, Terre Haute, Ind.

JOHN W. McMAHAN, pharmacist, in the firm of Perchbacher & McMahan Rochester, Ind.

JOHN H. MILLER, dispensing pharmacist at Eastern Indiana Hospital for Insane, Richmond, Ind.

JOHN ROSCOE MUTZ, prescription clerk, with Mutz & Lynch, Edinburg, Ind.

EMIL REYER, manufacturing chemist for South Bend Medicine Co., South Bend, Ind.

GEORGE B. SLOAN, prescription clerk, with Dr. George W. Sloan, Indianapolis, Ind.

FRANK M. THORN, prescription clerk, with R. M. Barber & Co., No. 460 63d Street, Chicago, Ill.

THOMAS A. WEST, prescription clerk, with Cheney & Hutchinson, Rockville, Ind.

1893.

GEORGE W. BATES, pharmacist, in the firm of Moore & Bates, Palmyra, Mo.

JAMES BRADEN, pharmacist, Joppa, Mich.

JOSEPH E. CARSON, prescription clerk, with Haworth, LaFayette, Ind.

JOHN C. CLARK, prescription clerk, with Mühl & Co., Indianapolis, Ind.

ROWLAND E. CLARK, dispensing pharmacist, at National Military Home, Marion, Ind.

JOSEPH L. CRAMER, pharmacist, Cedarville, Ohio.

MAYNARD M. ERB, prescription clerk, with Dr. Mapes (?), Indianapolis, Ind.

JACOB R. FRANCIS, analytical chemist, with Dr. J. N. Hurty, Indianapolis, Ind.

WALTER L. GERHART, Lodge Pole, Neb.

WALTER E. HARDMAN, prescription clerk, at Salem, Ill.

ISAAC M. HENDERSON, prescription clerk, with M. C. Huggins, East St. Louis, Ill.

GUS HESS, prescription clerk, with S. O. McKennan, Connersville, Ind.

JUSTUS C. HOUSER, taking a post-graduate course at Purdue School of Pharmacy, LaFayette, Ind.

JACOB A. LONG, prescription clerk, with L. C. Davenport, Bluffton, Ind.

MISS MYRTLE L. McMAHAN, with Perschbacher & McMahan, Rochester, Ind.

LOREN B. MILLER, prescription clerk, with Henry C. Pomeroy, Indianapolis, Ind.

HENRY H. NEAL, Upland, Ind.

JOHN H. ROCKWOOD, pharmacist, in the firm of Rockwood Bros., Alexandria, Ind.

JAMES H. WELLINGTON, Kentland, Ind.

WOOD WILES, prescription clerk, with H. Lindley's Sons, Bloomington, Ind.

LEONARD D. WORDEN, assistant in Chemistry, Purdue University, LaFayette, Ind.





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